Faria® MARINE INSTRUMENTS

Commander™

Speedometer / Depth Sounder

Owner's Manual

- **Digital Speedometer with Analog Appearance Digitally displays**
- **Depth in Feet, Meter, or Fathoms**
- **Shallow or Deep Water Alarms**
- **Alarms are Audio and Visual**
- **Keel Offset**
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FARIA® Commander™ Speedometer / Depth Sounder

The **FARIA® Commander™** Speedometer / Depthsounder combines the features of these two instruments with a **Trip Log**.

The instrument has three push buttons; ▼(DOWN), **M** (MODE), and ▲(UP); that control the modes of operation. The **M** (MODE) button is used to change the function of the LCD display and to access submenus and adjustable settings. The ▼ (DOWN) and ▲ (UP) buttons are used to modify the settings.

In normal operation mode, pressing the **M** (MODE) button for a short period of time causes the display to cycle between the Depthsounder display and the Trip Log display. Pressing and *holding* the **M** (MODE) button causes the display to change to the "settings" submenus (see **Figure 1**).

When the settings menus have been selected, pressing the **M** (MODE) button for a short period of time causes the display to cycle through the setting options. Within each setting selection, pressing the ▼ (DOWN) and ▲ (UP) buttons causes the affected setting to change. The microprocessor will automatically record the new settings as you adjust them.
When in a setting menu, pressing and *holding* the **M** (MODE) button returns to the main function.

Lighting

In normal operating mode the instrument lighting can be adjusted by pressing the ▼ (DOWN) and ▲ (UP) buttons.

Speedometer

The speedometer is a digital instrument with the appearance of an analog instrument. The speedometer is designed to be operated from a **Faria®** "paddle wheel" sensor. A microprocessor controlled stepper motor moves the pointer to display boat speed using a linear dial.
The microprocessor and stepper motor provide excellent accuracy. Variations in the operation of the "paddle wheel" sensor are however fairly common. These variations may be caused by the mounting location of the "paddle wheel" on the hull which affects water flow characteristics or turbulence and air bubbles in the area of the "paddle wheel". Therefore calibration of the speedometer may be required and is easily accomplished by using the Trip Log display or the pointer (see below).

Trip Log

The Trip Log is similar to the trip odometer in an automobile. The distance traveled, as recorded by the speedometer "paddle wheel", is displayed. The Trip Log may be reset to zero, the units of measure changed, or the calibration adjusted using the submenus. Pressing and holding the **M** (mode) button while the Trip Log is displayed will change the display to the "settings" menu (see **Figure 1**).

Trip Log "Settings" Menu
There are three items in the Trip Log "Settings" Menu; *Reset, Units*, and *Calibration*. Briefly pressing the **M** (mode) button cycles through the menu items. The microprocessor will automatically record the new settings as you adjust them.

Reset
Pressing the ▼ (DOWN) or ▲ (UP) button resets the Trip Log to zero.

Units
Pressing the ▼ (DOWN) or ▲ (UP) button cycles the units of measurement for the Trip Log between miles (MI) and nautical miles (NM).

Calibration
This menu item is used to simultaneously adjust the calibration of the Speedometer and the Trip Log. Two methods of calibration are possible.

1) The Trip Log can be set to zero and then a course of known distance run, such as between two buoys or by using a GPS. At the end of the run access the *Calibration* menu item. Press the ▼ (DOWN) or ▲ (UP) buttons to adjust the recorded Trip Log distance to match the known distance. This will calibrate both Trip Log and the Speedometer.

2) A GPS or radar gun can be used to obtain a fixed speed. While holding the boat at the selected speed press the ▼ (DOWN) or ▲ (UP) buttons to adjust the speedometer to match the GPS or radar gun indicated speed.

Depthsounder

The Depthsounder displays the depth of the water under the boat. The depth can be displayed in feet, meters, or fathoms. Audible and visual alarms can be set to warn of shallow or deep water conditions. A "keel offset" setting allows the operator to adjust for the difference in the location of the depthsounder transducer compared to the deepest part of the boats hull. The various settings are accessed by pressing and holding the **M** (mode) button while the Depthsounder is displayed (see **Figure 1**).

Depthsounder "Settings" Menu

There are four items in the Depthsounder "Settings" Menu; *Shallow Alarm, Deep Alarm, Keel Offset,* and *Units*. Briefly pressing the **M** (mode) button cycles through the menu items. The microprocessor will automatically record the new settings as you adjust them.

Shallow Alarm

Pressing the ▼ (DOWN) or ▲ (UP) button changes the setting for the *Shallow Alarm*. Setting the *Shallow Alarm* to zero turns off the alarm. To have this alarm indicate the depth of water under the deepest part of the hull, the *Keel Offset* must be properly set.

Deep Alarm

Pressing the ▼ (DOWN) or ▲ (UP) button changes the setting for the *Deep Alarm*. Setting the *Deep Alarm* to zero turns off the alarm.

Keel Offset

Pressing the ▼ (DOWN) or ▲ (UP) button changes the setting for the *Keel Offset*. Negative numbers indicate that the Depthsounder transducer is located ABOVE the deepest part of the hull (typical). Allow for worst case boat loading when adjusting the *Keel Offset* as this setting affects the *Shallow Alarm*.

Units

Pressing the ▼ (DOWN) or ▲ (UP) button cycles the units of measurement for the Depthsounder between feet (FT), meters (m), and fathoms (FA).

FARIA® Commander™ Speedometer / Depth Sounder LCD Display Modes:

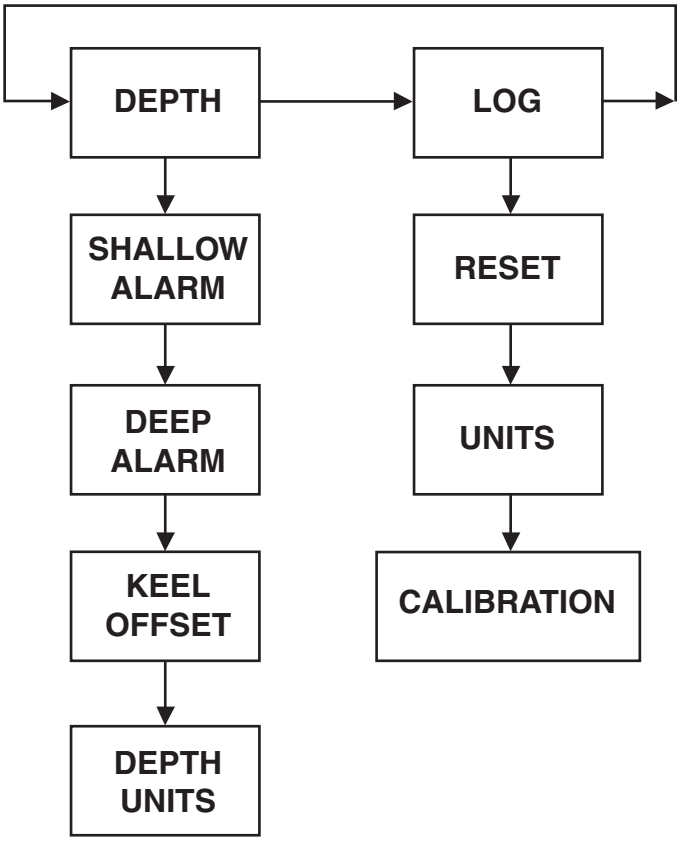

Figure 1